

miles west of it, and as the regional strike appears to be east-southeastward, one may infer that the Hosston underlies all of northwestern Florida also.

## GULF SERIES

### GENERAL FEATURES

In northwestern Florida rocks of the Gulf series partake somewhat of the character of contemporaneous deposits exposed farther north in Alabama. As revealed by cuttings from a well drilled in 1921 for the Chipley Oil Company at Falling Water, 4 miles south of Chipley, Washington County (Mossom, 1926, pp. 195-202), they include dark-brown micaceous sandy clay, gray calcareous clay, gray argillaceous limestone, and similar deposits. Mossom's description of gray argillaceous limestone between depths of 2415 and 3465 feet tallies well with the Selma chalk of Alabama, and Foraminifera taken within this interval were regarded by Cushman (Mossom, 1926, p. 203) as suggestive of that formation. *Ostrea cretacea* Morton? (identified by L. W. Stephenson) at 3615 feet and *Ostrea mesenterica* Morton and *O. cretacea* Morton (identified by J. J. Galloway) in dark-gray calcareous clay at 3693 feet suggest the Eutaw formation. Drilling was stopped in dark-brown finely micaceous, sandy clay at a depth of 4910 feet. It was found impossible to designate definite boundaries to the formations penetrated by this well, which was drilled with cable tools. A condensed log with suggested correlations is given by Semmes (1929, pp. 314-316).

More specific information about the subsurface conditions in northwestern Florida is contained in a description by Cole (1938) of the Granberry well, drilled in 1936, in sec. 15, T. 5 N., R. 9 W., about 7 miles northeast of Marianna, Jackson County. Cole places the top of the Upper Cretaceous at a depth of 1937 feet and supposes that the hole continues in the Upper Cretaceous to the bottom, at 5022 feet. He recognizes the Tuscaloosa, Eutaw, and Selma formations in this well but suggests the possibility that his supposed Tuscaloosa may really represent the Trinity group of the Comanche series. The foraminiferal faunas of his Selma are characteristic of the Taylor marl of Texas (Cole, 1938, p. 25).